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ABSTRACT

Research in an urban public school system (Grand Rapids, Michigan) was conducted to determine teachers' view of Ritalin for school children. Three questions were addressed: what contact with and information about Ritalin do teachers have; what attitude do teachers express toward Ritalin; and what professional behaviors do teachers report in regard to Ritalin use in classrooms. One hundred fifty teachers were selected from Grand Rapids Public Schools as subjects and were administered a questionnaire determining general familiarity with and attitudes toward Ritalin. It was found that teachers' contact with Ritalin was extensive, but their knowledge about the drug was questionable. Teachers were cautiously accepting of Ritalin but were in conflict about its use and the inconsistencies involved therein. As professionals, teachers were shown to be relatively isolated from the medical profession, only receiving one-way communications about the drug from school system specialists. Implications of this study indicate the need for a coherent educational perspective regarding the use of Ritalin as a behavior modifier. (Nine tables of data are included.) (Author/JB)

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# RITALIN FOR SCHOOL CHILDREN: THE TEACHERS' PERSPECTIVE

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ABSTRACT

Research in an urban public school system (Grand Rapids, Michigan) was conducted to determine teachers' views of Ritalin for school children. Three questions were addressed: What contact with and information about Ritalin do teachers have; What attitude do teachers express toward Ritalin; and What professional behaviors do teachers report in regard to Ritalin? Teachers' contact with Ritalin was extensive, but their knowledge about the drug questionable. Teachers were cautiously accepting of Ritalin but with obvious conflict and inconsistencies. Teachers' professional behaviors show them to be relatively isolated from the medical profession and engaging in one-way communication (giving information but not receiving) from school system specialists. Finally, conclusions and recommendations are developed from these findings.

# RITALIN FOR SCHOOL CHILDREN: THE TEACHERS' PERSPECTIVE[1]

## Objectives

The development of techniques for controlling the behavior of children in the school setting is an old problem. Certain behaviors of children in the classroom are considered deleterious to their learning and that of their classmates. The use of punishment by the teacher, the use of peer pressures and sanctions, the individualization of instruction, and the manipulation of the social structure of the classroom have all been accepted methods of securing behaviors appropriate to the learning situation. Relatively recently, however, medical procedures have been used for intellectually competent children to modify behaviors which are considered undesirable. Children who are diagnosed as hyperactive, minimally brain damaged, or who exhibit functional behavioral problems may be prescribed a behavior modification drug such as Ritalin (Methylphenidate hydrochloride).

The use of Ritalin has been controversial. Within the pages of popular and scholarly journals, as well as in the Committee Rooms of the United States House of Representatives, the discussion and debate of the issue continues. (Charles, 1971; Vinnege, 1971; Witter, 1971; Ladd, 1970; Schmitt, 1969). During a time of great concern about the misuse of drugs and the expenditure of time and money

to prevent and/or combat drug addiction, the use of Ritalin is not placidly accepted and has been the object of attack.

One result of this debate has been an irregular but sometimes intense pressure upon school systems and individual teachers. The purpose of this study is to examine the attitudes and beliefs about Ritalin as well as teachers' conceptions of their role with regard to children who may be candidates for (or already taking) Ritalin. Since the child who is being treated with Ritalin is frequently identified because of some learning abnormality it is obvious that the teacher may be involved as the individual who signals a problem, or as a provider of information about the learning situation to the physician. The teacher may also be required to modify instructional patterns to be more compatible with the needs of the child. The teacher's attitudes about Ritalin may be expressed in professional behavior which could effect the course of the medical treatment or reduce its usefulness in the school situation.

The attitudes and beliefs of significant individuals who are within preview of the child being treated may be a factor in the success of the treatment. Knobel (1962), for example, called attention to the importance of familial attitudes. Knobel contends that poor or negative results of drugs (such as Ritalin) may be partially a function of the "antidrug" attitudes of parents. Others have called attention to the salience of attitudes on the success of any treatment program. The Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children (1971) stated:

It is unjust to stigmatize a child in later life, when competing in various situations (applying for college, employment, or organizational membership by labeling him early in life as "stupid," an "emotional cripple," "a drug-taker," or by any other kind of unjustified and unfortunate stereotype.

Undesirable attitudes and beliefs about the use of drugs for treating behavioral problems may interfere with the success of the drug or may result in subsequent problems even when the drug is successful.

Teachers are a major group of significant others in the Ritalin programs of school children.

In this study, we planned to answer the questions: 1) What information do teachers have about Ritalin? 2) What attitude do teachers express toward Ritalin? 3) What professional behaviors do teachers report when encountering a child with behavioral problems or one who is taking Ritalin? If teachers are favorable or hostile it seemed important for us to know what knowledge they possessed; a hostile attitude may be a function of misinformation. We were also interested to explore relationships between attitudes and knowledge and other characteristics of teachers' such as number of past experiences with children known by the teacher to be taking Ritalin.

## Procedure

The subjects for this study were elementary school teachers in the Grand Rapids Public Schools. A sample of 150 teachers (20% sample) was selected by systematic random sampling to participate in the study.

A questionnaire was developed for the study and was called the Teacher's Opinion on Ritalin. The questionnaire consisted of three sections: Section One contained questions about the teacher's general

views about education that bear upon her perception of the appropriateness of using Ritalin. Teachers' self-assessment of ability to recognize a hyperactive child and general medical philosophy were examined in this section. Section Two dealt specifically with Ritalin. The teacher's information about and attitude toward Ritalin were examined. Section Three sought basic background questions about the teacher (age, grade level, etc.).[2]

Findings

The return rate for the questionnaire was 77%. The sex and age distribution of the respondents are very similar to that of the population of teachers from which it was drawn. Similarly, the distribution of the sample of teachers by number of years in teaching does not differ from that in the school system. (Jones, 1971). There is no reason to believe that our sample fails to represent the population of teachers in the school system.

The experience of the teachers with Ritalin is examined in Table 1. One-third of the teachers have had, to their knowledge, no children in their classes who are taking Ritalin. Slightly less than one-third have had such contact with one child, and the remaining teachers with more than one (for the most part two or three). Experience with Ritalin in the teacher's own family is very limited: two-and-a-half percent of the teachers have or had members of their families who were taking Ritalin. The large majority (85%) report they know what Ritalin is

and for what it is used. An even larger proportion, almost 95%, report they can recognize an over-active child. The data indicate, therefore, that most teachers have had some contact with the drug and that teachers believe they possess an understanding of the drug and the conditions for which it is used.

[Table 1 about here]

Tables 2, 3, and 4 present data about teachers' involvement when the need for Ritalin may be indicated or Ritalin is being used.

[Table 2 about here]

As Table 2 indicates, many teachers take several steps upon encountering an over-active child. The teacher's major efforts are within the school system; 182 responses specify that principals or school specialists are informed. A majority of the teachers contact also the parents. Of interest is the finding that 40% suggest to parents that a physician be contacted.

When a child is put on a Ritalin program, about two-thirds of the teachers report they are or have been asked to evaluate its effectiveness. Twenty-eight percent report that they have always been asked to evaluate, and 36% indicate that this occurs "generally" or "sometimes."

[Table 3 about here]

The data in Table 3 take on more meaning when seen in relation to Table 4. When asked by whom their evaluation is requested, one-third of the teachers do not respond. Since this does not appear to be a sensitive question, this percentage of no response may perhaps be interpreted as "can't recall." Or, the percentage of reported requests for responses

may be inflated. Slightly over one-third of the teachers made their evaluation to the parents, but only 15 percent reported an evaluation contact with the physician.

[Table 4 about here]

Table 5 presents the responses of the teachers to posited characteristics of Ritalin. The teachers were asked to indicate whether they agreed, disagreed or did not know if Ritalin had a series of specific properties.

[Table 5 about here]

These findings should be viewed in the context of the finding (Table 1) that 85 percent of the teachers reported they knew what Ritalin was used for. Noteworthy in this table is the proportion of "don't know" responses. They range from 1.8% to 60%. Most items received 30% to 40% "don't know" responses. In addition, however, approximately 20% to 25% of the respondents failed to respond to each item. This large proportion of no responses is most reasonably interpreted as "don't know." If this interpretation is applied, 25 to 75 percent of the teachers responding do not know whether the specified properties of Ritalin are indeed present; the majority of the properties of Ritalin are responded to in the "don't know" and "no answer" categories by over 50% of the sample. Substantive responses to these items, while frequently comprising less than 50 percent of the responses are of interest. Six percent of the respondents, or 17 percent of those responding substantively, think Ritalin is habit forming. Similarly, of those responding "yes" or "no," 41 percent disagree that it is not needed after puberty; 93 percent agree it tranquilizes; 27 percent think it stimulates intelligence. These substantive responses, in

combination with the large proportion of "don't know" and "no answers," leads to a questioning of the extent of understanding about Ritalin in this population of teachers.

[Table 6 about here]

Table 6 reports teachers' feelings about their role in the use of Ritalin. One-third of the teachers confine their involvement to being informed only. Slightly more than one-third feel teachers should participate more actively by identifying students who may need Ritalin. The more extreme views of total involvement or total control are not endorsed by the teachers. It should be noted, also, that 16 percent of the teachers did not respond to this item.

[Table 7 about here]

Table 7 deals directly with the teachers' attitude toward the use of Ritalin for children under a physician's supervision. None of the teachers agreed with the most positive evaluation of Ritalin; less than two percent selected the most negative. Most of the teachers who responded agreed with the cautious statement that Ritalin "has limited use." Almost three times as many thought Ritalin has "resulted in fine gains" (30%) for children than said that it was used "too freely" (11%). In sum, the teachers seem cautiously favorable toward Ritalin. Once again, however, almost 16 percent of the sample did not commit themselves to a position.

[Table 8 about here]

An attempt was made to measure a belief thought to underlie and be productive of attitudes toward the use of Ritalin. The item to which the teachers were asked to respond was, "We all have feelings about the proper way in which individuals should be able to function and interact.

Select the one response which best describes your feelings." The majority of teachers felt medical intervention should be reserved for major difficulties. Philosophically, teachers generally take a medically conservative position.

The remainder of the analysis was devoted to an examination of those beliefs and characteristics of teachers which are associated with attitudes toward the use of Ritalin. Female teachers seem slightly more favorable toward the use of Ritalin than male teachers, though the number of male teachers in the sample is too small to feel comfortable with this generalization. There is a convergence between the teachers' perception of their role in children's use of Ritalin and their attitudes toward the use of Ritalin. Few teachers (20%) who would have the teacher take a passive role (be informed only) think Ritalin results in fine gains compared to those who would take an active role by identifying students who are candidates for Ritalin (40%). Twenty-five percent of the teachers taking the passive role think Ritalin is used too freely, while only 5% of the teachers taking an active role think so. There is also a discernible relationship between the frequency of teacher evaluation requested and teacher attitude toward Ritalin. The more frequently consulted teachers are more positive toward the use of Ritalin. Reasonably, therefore, those teachers most favoring the use of Ritalin are prepared to be and are most active in the development of Ritalin medical programs for school children.

[Table 9 about here]

A most important finding is presented in Table 9. The pattern is clearly and significantly that those teachers with the greatest experience

with children taking Ritalin are also most favorable toward Ritalin. This observation is completed by data which indicate that with increased exposure to children taking Ritalin and with more positive attitudes toward Ritalin there is no consistent or systematic decrease in the proportion of "don't knows" or proportion of correct attribution of properties to Ritalin. Put another way, experience with Ritalin and endorsement of its use is not associated with knowledge about it.

The relationship of the underlying belief about personality alteration to attitude toward Ritalin is not straight forward. Teachers assuming a conservative stance on personality alteration are somewhat more likely to say that Ritalin is used too freely. But 50% of those taking the liberal stance did not respond to the question about attitudes toward Ritalin, while 18% of the conservatives failed to respond. The "liberals" seem to be reserving judgment on the use of Ritalin.

## Conclusions and Implications

Overall the attitudes of teachers toward the use of Ritalin were cautiously favorable. There seems to be no strong opposition to Ritalin from practicing teachers. Evidently, teachers have not been convinced by opponents of Ritalin that it is an improper treatment for dealing with functional behavioral problems. This is particularly noteworthy when compared with research which indicates that 48% of superintendents disapprove of drugs used for in classrooms for behavioral modification and 46% of the sample of superintendents think such drugs have possibilities but conclusions are premature. (Nation's Schools, 1971). Of course, teachers are less subject to interaction with pressure groups

than superintendents and superintendents are not exposed to the day-by-day problems of the classroom.

While it is not uncommon for a teacher to have direct experience with a pupil on a Ritalin regime, it is uncommon for teachers to have specific and accurate information about the characteristics of the drug. Further, knowledge of the drug does not increase with an increase in experience or an increase in favorable attitude toward the drug. Since the use of Ritalin is so closely connected with the classroom performance of the child the necessity for the teacher to understand it is clear. The educationally salient properties of Ritalin can be explained through the normal use of inservice training. School systems might use published materials to acquaint teachers with the properties and uses of Ritalin. Colleges of education should make instruction about behavior modification drugs such as Ritalin a routine part of their curriculum.

It seems clear that the welfare of the child who is taking (or needs) Ritalin requires closer coordination of the medical and teaching profession. Forty percent of the teachers reported that they recommend consultation with a physician for children who appear hyperactive, only fifteen percent of the teachers, however, report that physicians request evaluation from them concerning children who have been prescribed Ritalin. Direct communication between physician and teacher is infrequent. Teachers should be encouraged to work in cooperation with physicians, and the physicians should make greater use of the teacher, since teachers can perform a unique function in the evaluation of the success of the treatment.[3]

Similar observations can be made about the relationship between the teacher and school system specialists. Teachers report the highest percent of referrals of hyperactive children (83%) to school system specialists, but only two-and-a-half percent of the teachers report that evaluations are requested of them by special personnel in the school system. Although the school system specialist has the opportunity for direct observation of the child that the physician does not, the disparity of these percentages should alert us to the possibility that intra-school coordination may require attention.

The use of chemotherapy for the treatment of behavior disorders has continued to grow since World War II. The increase of these chemical tools has been accompanied by a growing public discomfort about their desirability. This appears to stem from concern about the illegitimate and promiscuous use of drugs, the violation of "natural" processes in the human being, and the use of drugs to treat symptoms rather than causes of disorders. Teachers appear to share some of these views, but appear ambivalent; they accept the use of Ritalin but they are reserved in their acceptance of the principle of chemotherapy.

This disjuncture may result in confusion of teachers about teacher role. Teachers are equally divided between passive role, an active and cooperative role, and miscellaneous and uncertain responses. Considering the disparate beliefs and professional behaviors of teachers, the question could be posed: Is individual decision making on the part of the teacher adequate for the welfare of children who are or will be taking Ritalin? The uncertainties of the teachers underline the complexities of the problem. Superintendents are faced with political pressures, teachers

are divided with regard to their professional role, physicians will continue to prescribe Ritalin and similar drugs, and society will both endorse and condemn the use of Ritalin for children. This calls for no less than a school system wide involvement in the formation of coherent educational perspectives in the use of Ritalin. Teachers should have guidelines about their professional behaviors with reference to the use of Ritalin in educational applications. Physicians, in order to be effective, should be able to expect a relatively constant response on the part of school system personnel.

## NOTES

[1]This research was supported by and conducted through the facilities of the Grand Rapids Public Schools - Western Michigan University Center for Educational Studies. Thanks are also given to Fredrick Margolis, M.D. for medical consultation, James Jones for research assistance, and Diane Krombeen for data management.

[2]The questionnaire was pretested in several graduate sections of education courses which contained practicing elementary teachers. The pretests enabled the reduction of ambiguity as well as the formulation of more meaningful response categories. The questionnaire was also reviewed by a practicing pediatrician.

[3]Some clinical observation indicates that the hyperkinetic child is often misleadingly quiessent in a one-to-one medical interaction with a physician. (See Oettinger, 1971, p. 165).

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TABLE 1

Teachers' Experience With and
Knowledge Relevant to Ritalin

| Item | Frequency | Percent |
|---|---|---|
| Number of children taking Ritalin taught: | | |
| 0 | 39 | 34.2 |
| 1 | 33 | 30.0 |
| 2 | 14 | 12.3 |
| 3 | 14 | 12.3 |
| 4 | 4 | 3.5 |
| 5 | 2 | 1.8 |
| 6+ | 8 | 7.0 |
| Has member of your family taken (or now taking) Ritalin? | | |
| Yes | 3 | 2.6 |
| No | 109 | 95.6 |
| No answer | 2 | 1.8 |
| Do you know what Ritalin is used for? | | |
| Yes | 97 | 85.1 |
| No | 14 | 12.3 |
| No answer | 3 | 2.6 |
| Can you recognize an over-active child? | | |
| Yes | 108 | 94.7 |
| No | 5 | 4.4 |

TABLE 2

If You Recognize an Over-Active Child,
What Steps Do You Take?

| Categories | Frequency | Percent |
|---|---|---|
| Nothing | 1 | 1.0 |
| Inform Family | 81 | 71.0 |
| Inform Principal | 87 | 76.3 |
| Inform Specialist | 95 | 83.3 |
| Discuss with Class | 16 | 14.0 |
| Separate Child | 12 | 10.5 |
| Emphasize Quiet Activity | 30 | 26.3 |
| Recommend Contact Doctor | 46 | 40.1 |

TABLE 3

Frequency of Teachers' Evaluation
Elicited for Children on Ritalin

| | Frequency | Percent* |
|---|---|---|
| Almost Always | 21 | 28.0 |
| Generally | 16 | 18.9 |
| Sometimes | 13 | 17.3 |
| Not Usually | 6 | 8.0 |
| Almost Never | 13 | 17.3 |
| No Response | 6 | 8.0 |

* Tabulated for those teachers who report contact with children taking Ritalin.

TABLE 4

By Whom Teacher's Evaluation of
Child on Ritalin Requested

| Person | Frequency | Percent* |
|---|---|---|
| Parents | 26 | 34.7 |
| Other Teachers | 1 | 1.3 |
| Principal | 1 | 1.3 |
| Special Teachers | 0 | --- |
| Social Worker | 2 | 2.6 |
| Physician | 11 | 14.7 |
| Others | 10 | 13.3 |
| No Response | 24 | 32.0 |

* Tabulated for those teachers who report contact with children taking Ritalin.

TABLE 6

Teachers' Perception of Their
Role in Use of Ritalin

| | Agreement | |
|---|---|---|
| Role | Frequency | Percent |
| Teacher should not be involved | 1 | 1.0 |
| Teacher only informed | 38 | 33.3 |
| Teacher help identify students in need | 40 | 35.1 |
| Teacher should determine need | 2 | 1.8 |
| Teacher should distribute Ritalin | 1 | 1.0 |
| Others | 14 | 12.3 |
| No Answer | 18 | 15.8 |

TABLE 5

Teachers' Knowledge of Properties of Ritalin

| Property | Yes | | No | | Don't Know | | No Answer | |
|---|---|---|---|---|---|---|---|---|
| | Frequency | % | Frequency | % | Frequency | % | Frequency | % |
| Is habit forming | 7 | 6.1 | 34 | 29.8 | 49 | 43.0 | 24 | 21.1 |
| Has side effects | 37 | 32.5 | 7 | 6.1 | 46 | 40.4 | 24 | 21.1 |
| Not needed after puberty | 16 | 14.0 | 11 | 9.7 | 61 | 53.5 | 26 | 22.8 |
| Physiological action not understood | 43 | 37.7 | 9 | 7.9 | 36 | 31.6 | 26 | 22.8 |
| Alters personality | 22 | 19.3 | 44 | 38.6 | 24 | 21.1 | 24 | 21.1 |
| Tranquilizes | 81 | 71.1 | 6 | 5.3 | 2 | 1.8 | 25 | 21.9 |
| Stimulates intelligence | 14 | 12.3 | 47 | 41.2 | 24 | 21.1 | 29 | 25.4 |
| Must be taken in large doses | 4 | 3.5 | 54 | 47.4 | 31 | 27.2 | 25 | 21.9 |
| Stimulates sexual behavior | 0 | --- | 31 | 27.2 | 60 | 52.6 | 23 | 20.2 |
| Less dangerous than aspirin | 2 | 1.8 | 33 | 29.0 | 55 | 48.3 | 24 | 21.1 |
| Attention span increases | 80 | 70.2 | 4 | 3.5 | 8 | 7.0 | 22 | 19.3 |
| Impairs coordination | 6 | 5.3 | 55 | 48.3 | 28 | 24.6 | 25 | 21.9 |
| Effective for 5 hours a dose | 23 | 20.2 | 7 | 6.1 | 57 | 50.0 | 27 | 23.7 |
| Is toxic substance | 2 | 1.8 | 18 | 15.8 | 68 | 59.7 | 26 | 22.8 |

TABLE 7

Teachers' Feelings About Use of Ritalin

| Feeling | Agreement | |
|---|---|---|
| | Frequency | Percent |
| Use Not Justified | 2 | 1.8 |
| Is Used Too Freely | 13 | 11.4 |
| Has Limited Use | 47 | 41.2 |
| Has Resulted in Fine Gains | 34 | 29.8 |
| Resulted in New Lives | 0 | --- |
| No Answer | 18 | 15.8 |

TABLE 8

Teachers' Feelings About Personality Alteration

| Feelings Category | Frequency | Percent |
|---|---|---|
| Strong Ind. Solve Own Problems | 6 | 5.3 |
| Medical Intervention Only for Major Difficulty | 71 | 62.2 |
| Pressures Call for Medication Use and Devel. | 13 | 11.4 |
| Should Change Humans | 3 | 2.6 |
| Other | 16 | 14.0 |

TABLE 9

Teachers' Attitude Toward Ritalin By
Number of Children on Ritalin Taught

| Number of Children | Use Not Justified | | Used Too Freely | | Has Limited Use | | Results in Fine Gains | | No Answer | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Frequency | % | Frequency | % | Frequency | % | Frequency | % | Frequency | % |
| None | 1 | 2.6 | 6 | 15.4 | 11 | 28.2 | 7 | 17.9 | 14 | 30.9 |
| 1 or 2 | 1 | 2.1 | 6 | 12.8 | 27 | 57.4 | 10 | 21.3 | 3 | 6.4 |
| 3 or more | 0 | 0 | 1 | 3.7 | 9 | 33.3 | 16 | 59.3 | 1 | 3.7 |

$\chi^2 = 33.62$

$P < .001$